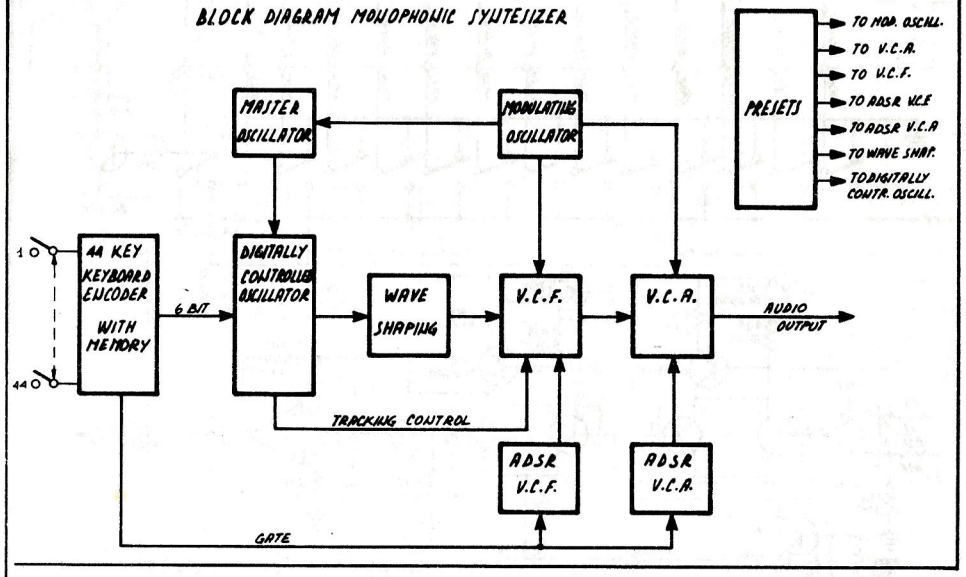
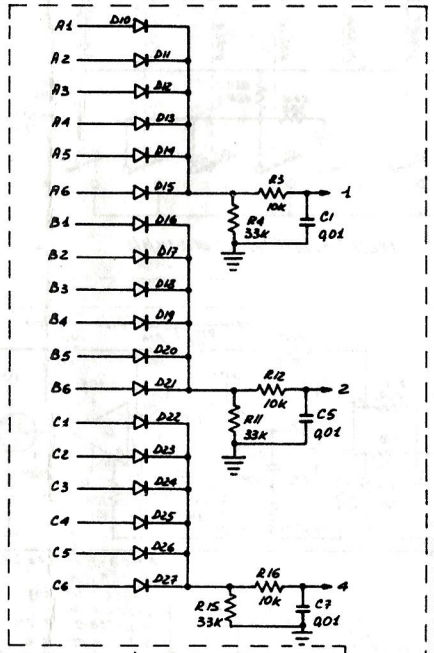
EKO

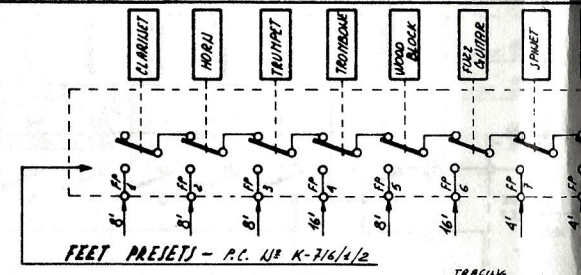
ELECTRIC SCHEMATIC

ORGAN Mod. EKOSYNTH

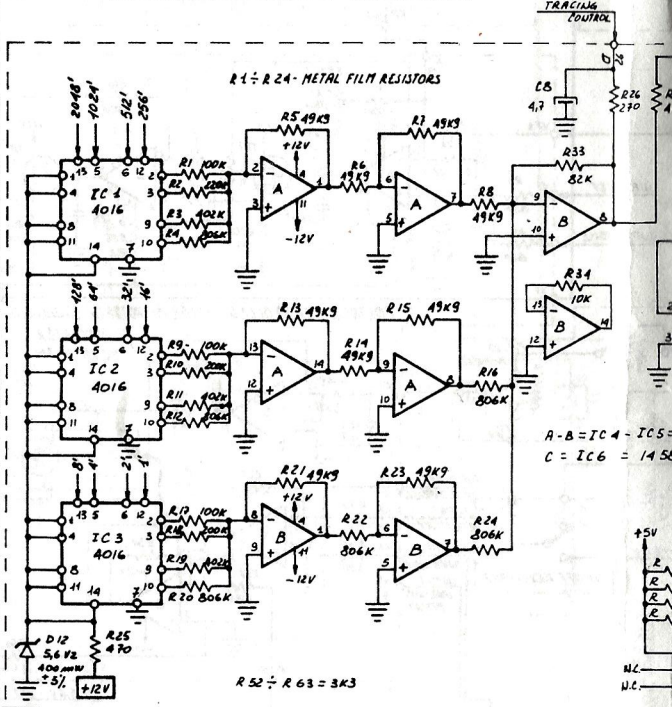
BLOCK DIAGRAM MONOPHONIC SYNTESIZER



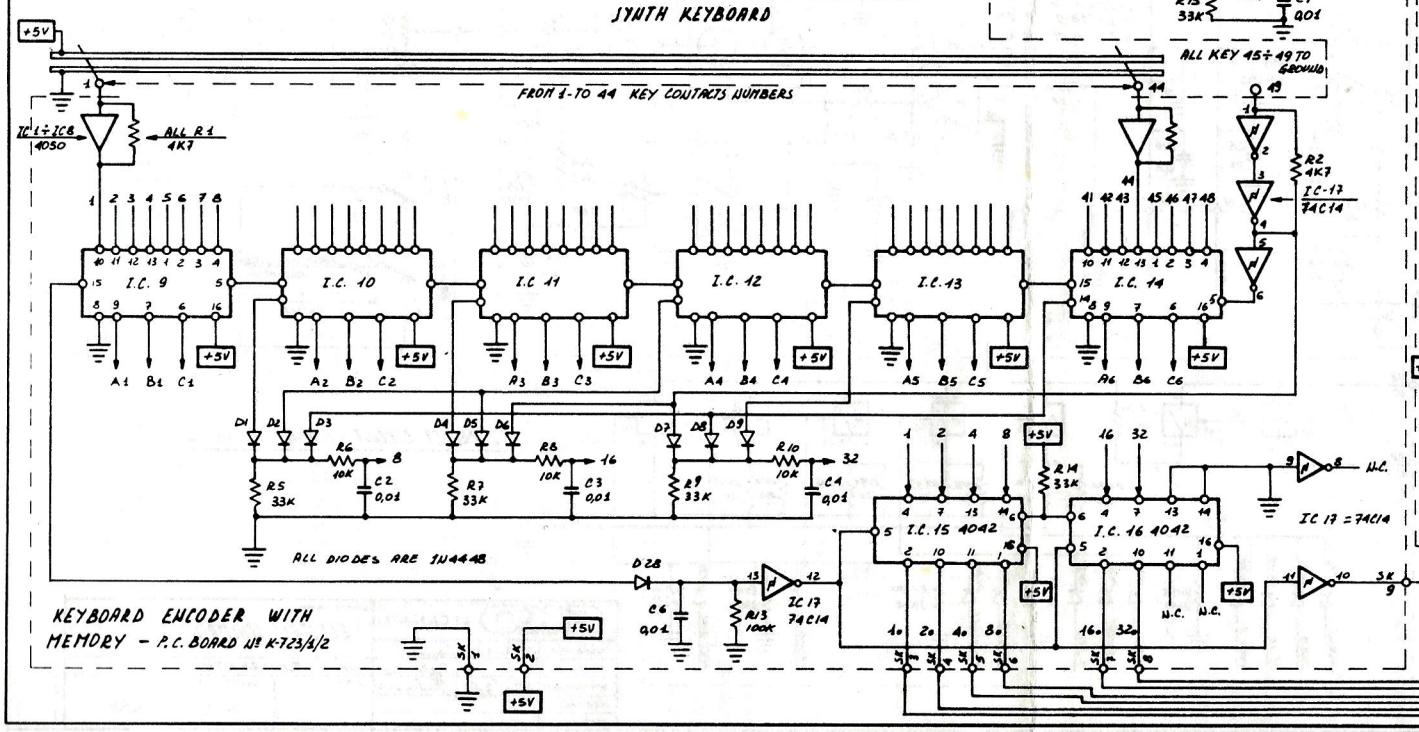




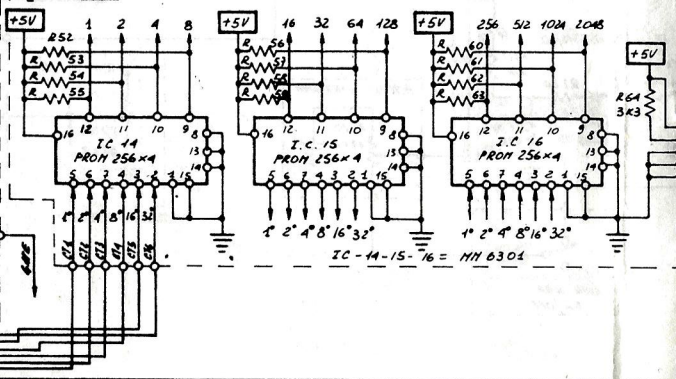
FEET PRESETS - P.C. N° K-7/6/4/2

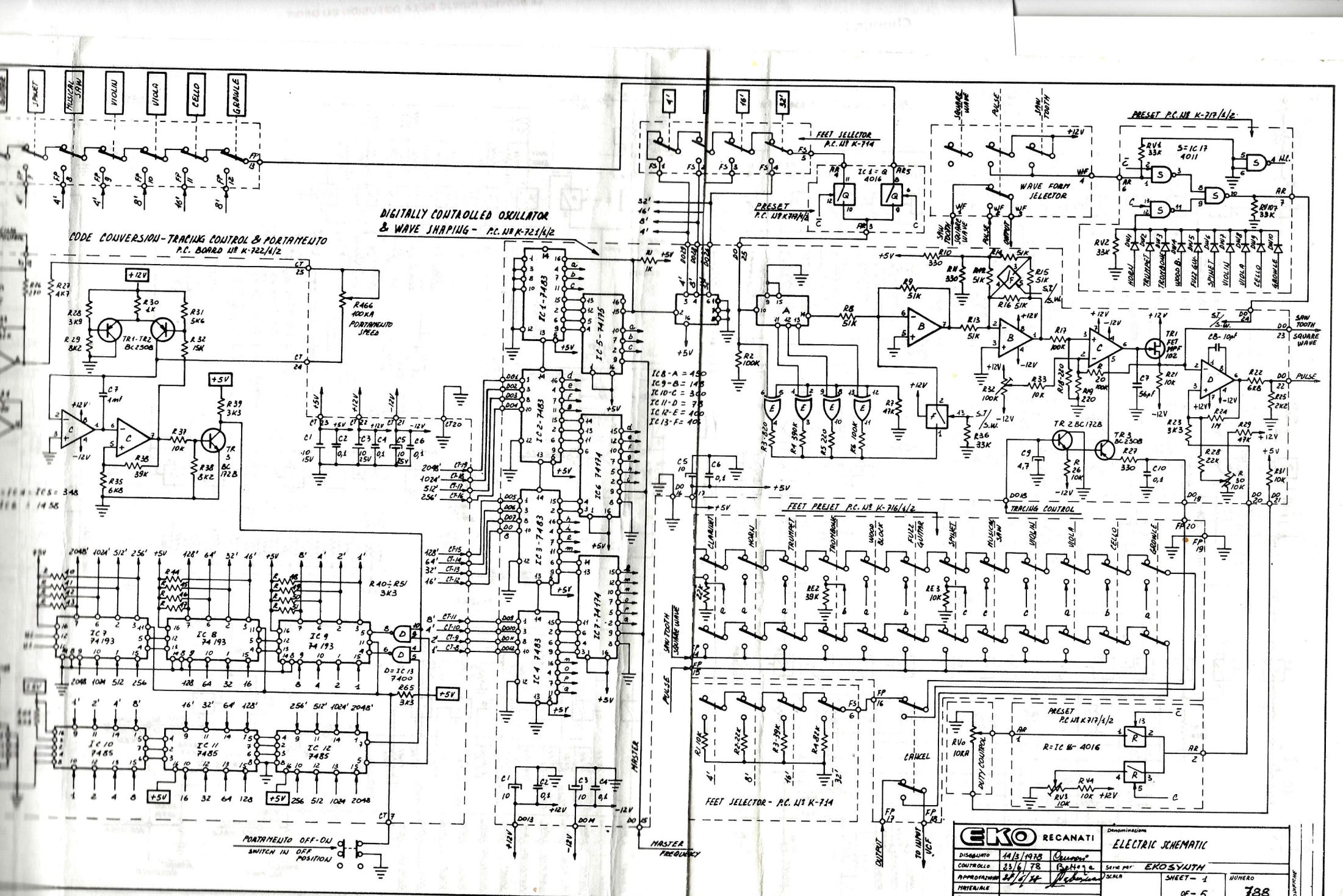


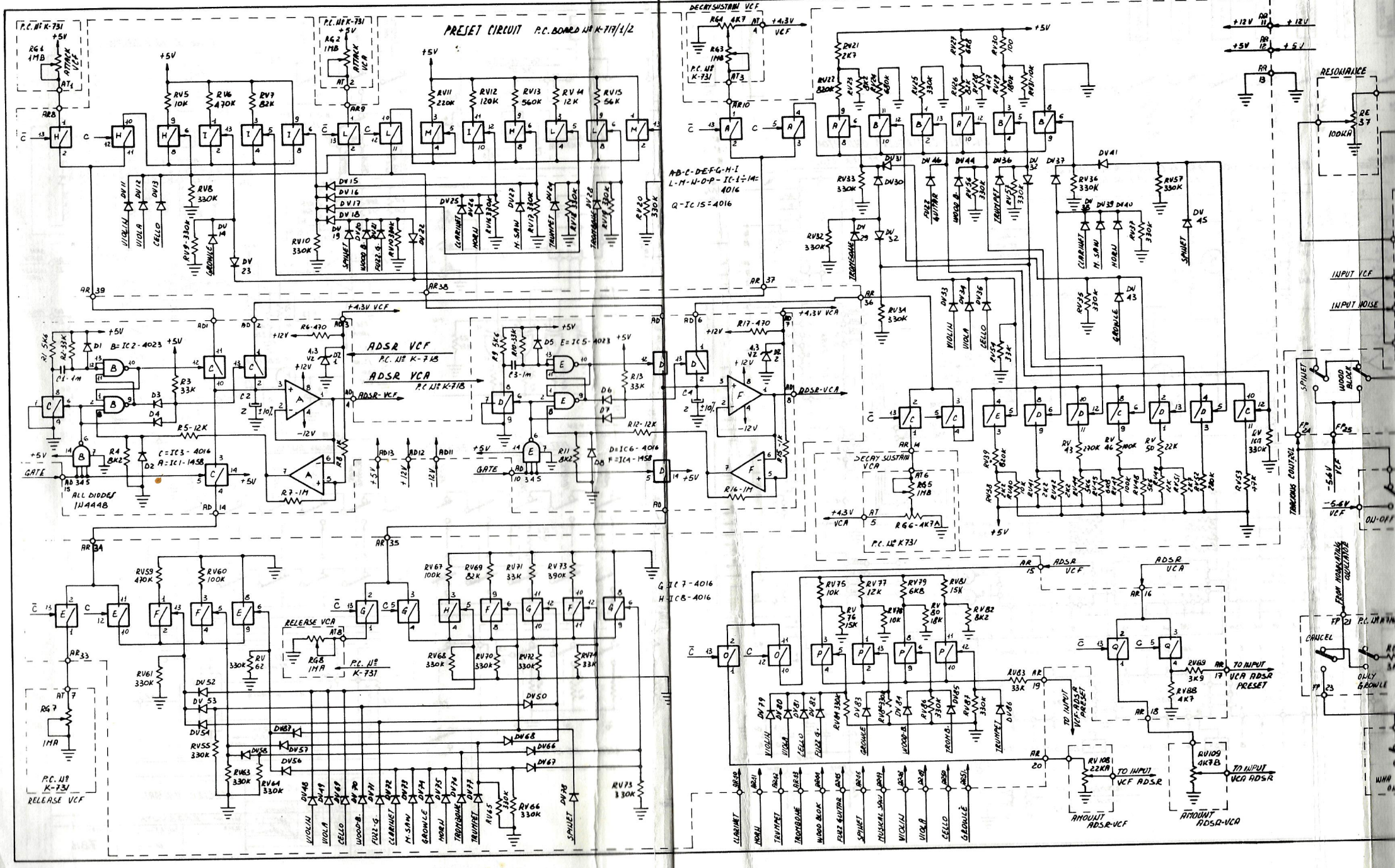
SYNTH KEYBOARD

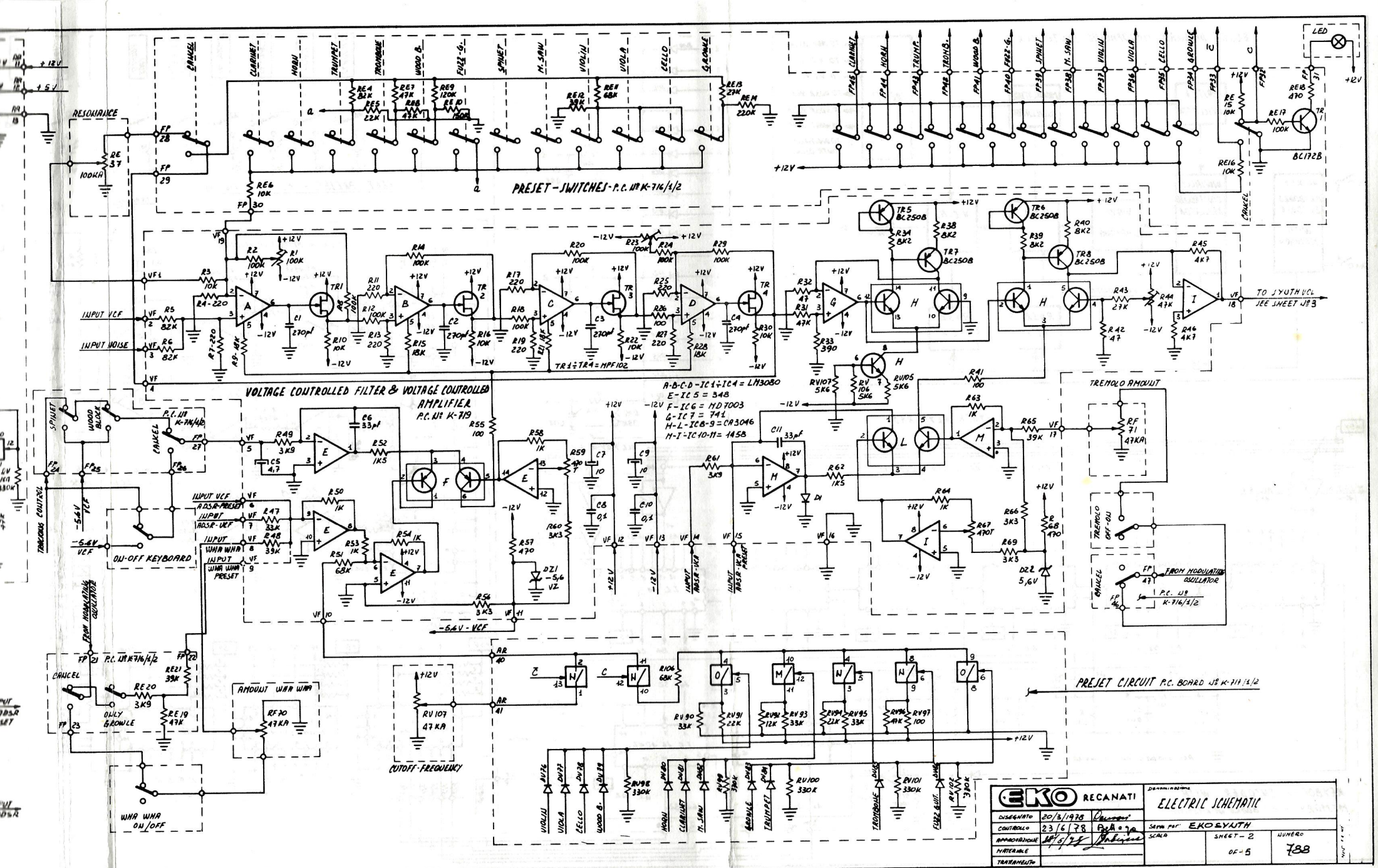


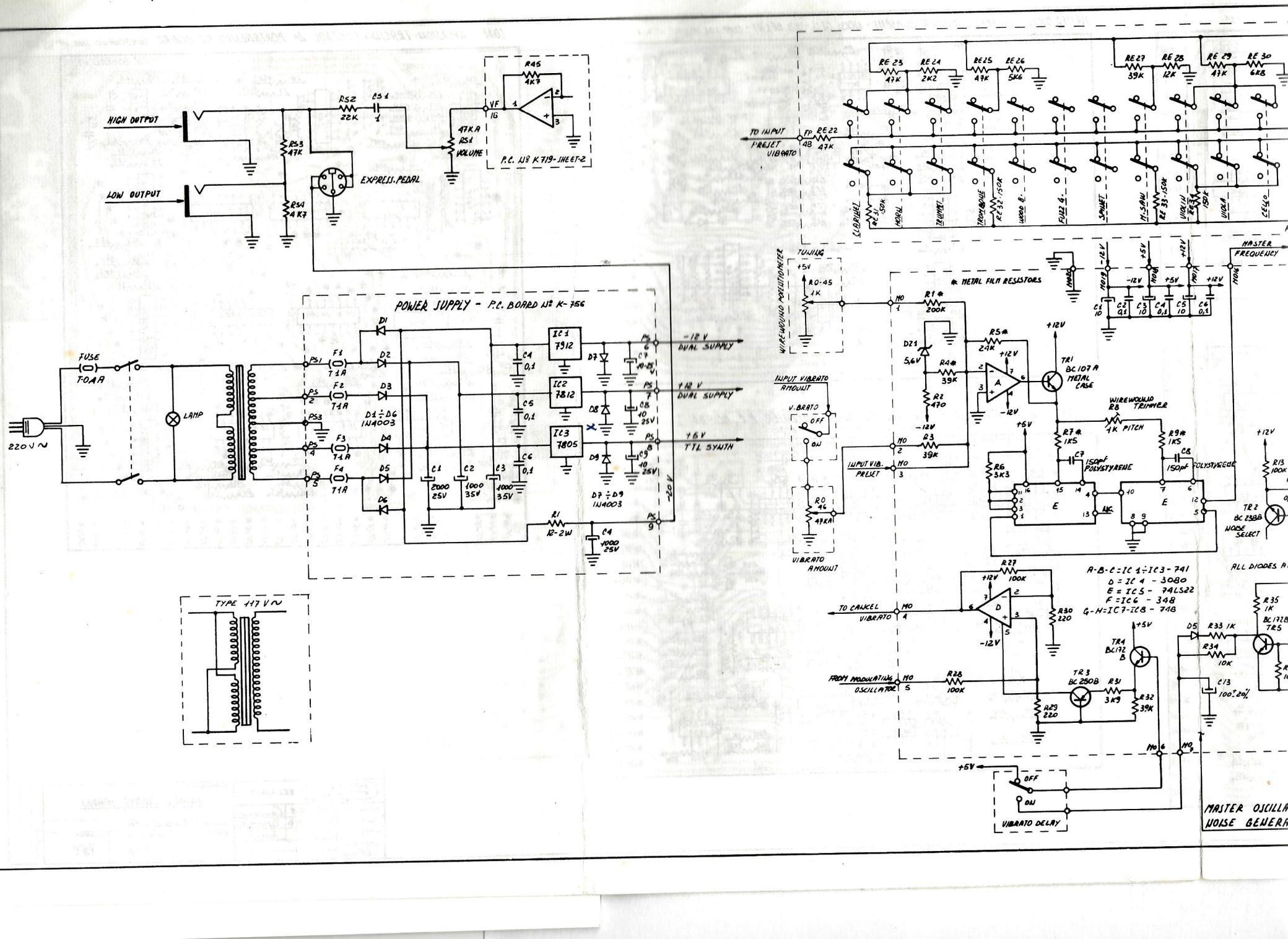
KEYBOARD ENCODER WITH MEMORY - P.C. BOARD N° K-723/1/2

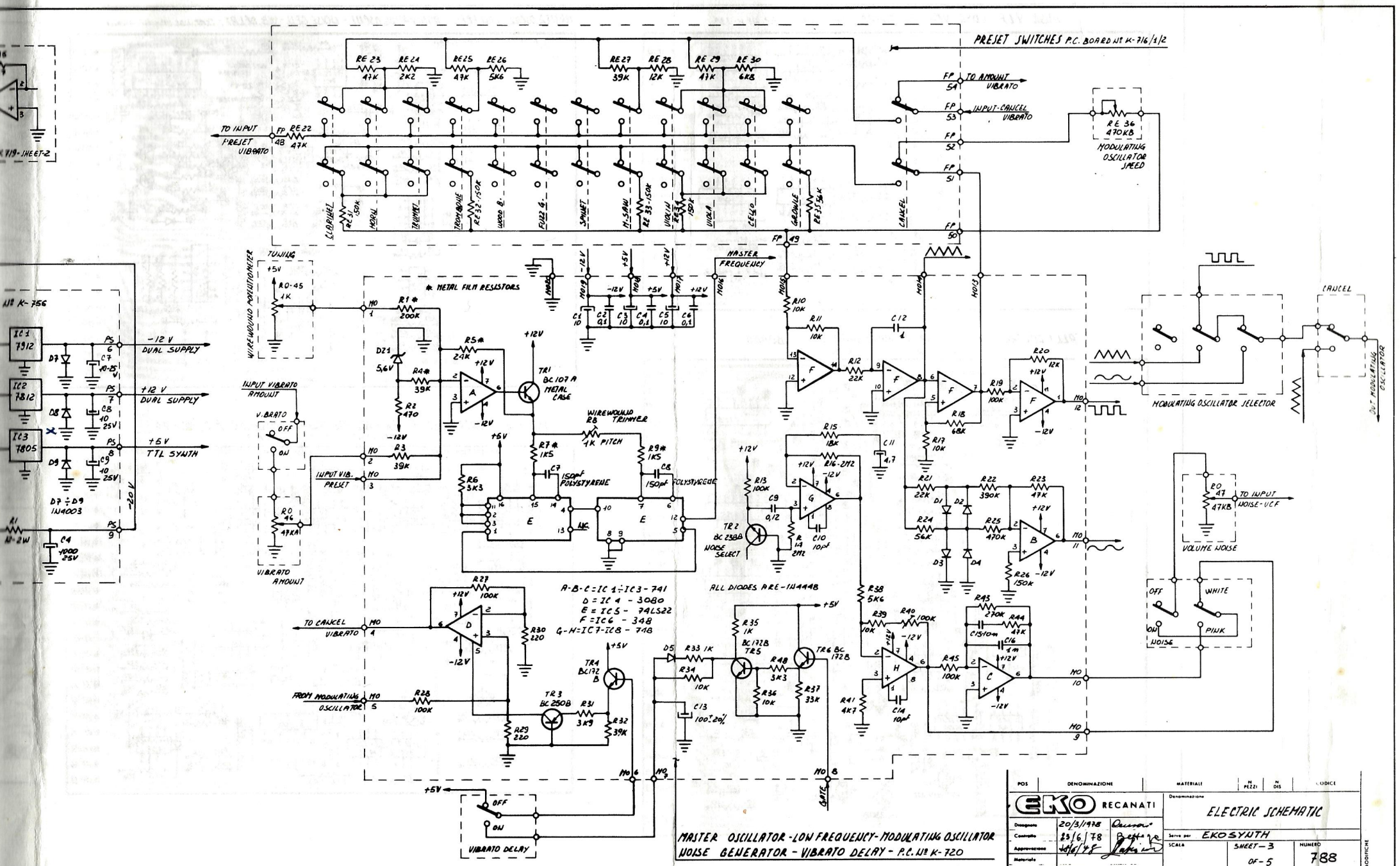



DIGITALLY CONTROLLED OSCILLATOR & WAVE SHAPING - P.C. N° K-721/1/2
CODE CONVERSION - TRACING CONTROL & PORTAMENTO P.C. BOARD N° K-722/1/2
FEET SELECTOR P.C. N° K-714
PRESET P.C. N° K-719/1/2
WAVE FORM SELECTOR
PRESET P.C. N° K-717/1/2
FEET PRESET P.C. N° K-716/1/2
TRACING CONTROL
FEET SELECTOR - P.C. N° K-714
PRESET P.C. N° K-717/1/2
R=IC 16 - 4016
PORTAMENTO OFF-ON
SWITCH IN OFF POSITION
MASTER FREQUENCY
SAW TOOTH
SQUARE WAVE
PULSE
FLAUTINO
HORN
TRUMPET
TROMBONE
WOOD BLOCK
FUZZ GUITAR
SPINET
MUSICAL SAW
VIOLIN
VIOLA
CELLO
GRAVILE
ELECTRIC SCHEMATIC
EKO RECANATI
SHEET - 1
OF - 5
788


PRESET CIRCUIT P.C. BOARD Nº K-717/1/2
P.C. Nº K-731
ATTACK VCF
ATTACK VCA
DECAY SUSTAIN VCF
DECAY SUSTAIN VCA
ADSR VCF
P.C. Nº K-718
ADSR VCA
P.C. Nº K-718
ALL DIODES 1W4448
RELEASE VCA
P.C. Nº K-731
RELEASE VCF
P.C. Nº K-731
A-B-C-D-E-F-G-H-I L-M-N-O-P - IC-1÷14= 4016
Q-IC 15 = 4016
G IC 7 - 4016 H IC 8 - 4016
B= IC 2 - 4023
C= IC 3 - 4016 A= IC 1 - 1458
D= IC 6 - 4016 F= IC 4 - 1458
E= IC 5 - 4023
RESONANCE
INPUT VCF
INPUT NOISE
TUNING CONTROL
WOOD BLOCK
CANCEL
ON-OFF
TO INPUT VCF ADSR
TO INPUT VCA ADSR
AMOUNT ADSR-VCF
AMOUNT ADSR-VCA
VIOLIN
VIOLA
CELLO
GROWLE
CLARINET
H. SAW
HORN
TROMBONE
TRUMPET
SPINET
WOOD B.
FUZZ G.


PRESET - SWITCHES - P.C. N° K-716/1/2
VOLTAGE CONTROLLED FILTER & VOLTAGE CONTROLLED AMPLIFIER
P.C. N° K-719
A-B-C-D - IC1÷IC4 = LM3080
E - IC 5 = 348
F - IC 6 = MD 7003
G - IC 7 = 741
H-L-IC8-9 = CA3046
M-I-IC10-11 = 1458
TR1÷TR4 = MPF102
PRESET CIRCUIT P.C. BOARD N° K-717/1/2
TREMOLO AMOUNT
CUTOFF-FREQUENCY
AMOUNT WHA WHA
WHA WHA ON/OFF
ON-OFF KEYBOARD
TO SYNTH VCL
JEE SWEET N°3
FROM MODULATION OSCILLATOR
P.C. N° K-716/1/2
INPUT VCF
INPUT NOISE
RESONANCE
TRACKING CONTROL
CANCEL
ONLY GROWLE
EKO RECANATI
ELECTRIC SCHEMATIC
SERIE PAT. EKO SYNTH
SCALA
SHEET - 2 OF - 5
NUMERO 788
DISEGNATO 20/3/1978
CONTROLLO 23/6/78
APPROVATO 26/6/78

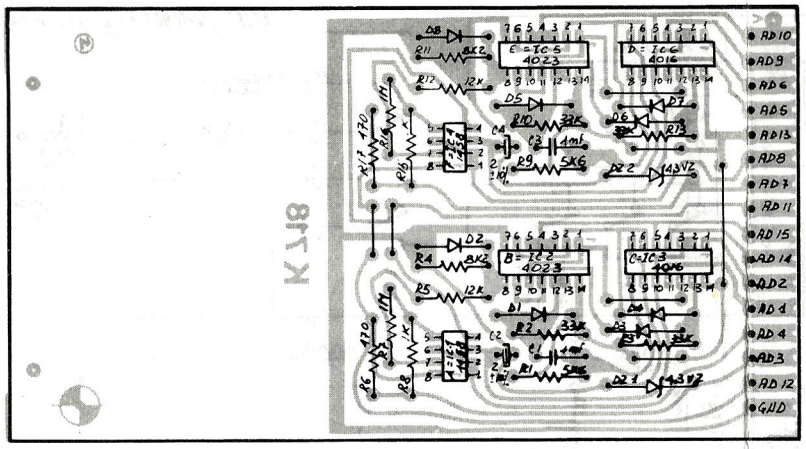

HIGH OUTPUT
LOW OUTPUT
RS2 22K
RS1
RS3 47K
RS4 4K7
EXPRESS. PEDAL
47KA RS1 VOLUME
R45 4K7
VF
IG
P.C. N° K 719 - SHEET-2
POWER SUPPLY - P.C. BOARD N° K-756
FUSE T.0,4 A
220 V ~
LAMP
F1 T1A
F2 T1A
F3 T1A
F4 T1A
D1
D2
D3
D4
D5
D6
D1 ÷ D6 IN4003
IC1 7912
IC2 7812
IC3 7805
C1 2000 25V
C2 1000 35V
C3 1000 35V
C4 0,1
C5 0,1
C6 0,1
C7 10-25V
C8 10 25V
C9 10 25V
D7 ÷ D9 IN4003
R1 12-2W
C4 1000 25V
-12 V DUAL SUPPLY
+12 V DUAL SUPPLY
+6 V TTL SYNTH
-20 V
TYPE 117 V ~
TO INPUT PRESET VIBRATO
FP
RE 22 47K
RE 23 47K
RE 24 2K2
RE 25 47K
RE 26 5K6
RE 27 39K
RE 28 12K
RE 29 47K
RE 30 6K8
CLARINET
MORAL
TRUMPET
TROMBONE
OBOE
FLUTE
SAXOFF
VIOLIN
VIOLA
CELLO
TUNING
WIREWOUND POTENTIOMETER
R0-45 1K
* METAL FILM RESISTORS
MASTER FREQUENCY
R1* 200K
DZ1 5,6V
R4* 39K
R2 470
R5* 2,4K
TR1 BC 107 A METAL CASE
WIREWOUND TRIMMER R8 1K PITCH
R7* 1K5
R9* 1K5
C7 150pF POLYSTYRENE
C8 150pF POLYSTYRENE
R6 3K3
R3 39K
INPUT VIBRATO AMOUNT
V. BRATO
OFF
ON
R0 46 47KA
VIBRATO AMOUNT
INPUT VIB. PRESET
TR2 BC 238B NOISE SELECT
R27 100K
TO CANCEL VIBRATO
R30 220
R28 100K
FROM MODULATING OSCILLATOR
R29 220
TR3 BC 250B
R31 3K9
R32 39K
TR4 BC 172 B
R33 1K
R34 10K
C13 100 20%
R35 1K
TR5 BC 172B
A-B-E = IC 1 ÷ IC 3 - 741
D = IC 4 - 3080
E = IC 5 - 74LS22
F = IC 6 - 348
G-H = IC 7 - IC 8 - 748
ALL DIODES
VIBRATO DELAY
OFF
ON
MASTER OSCILLA
NOISE GENERA



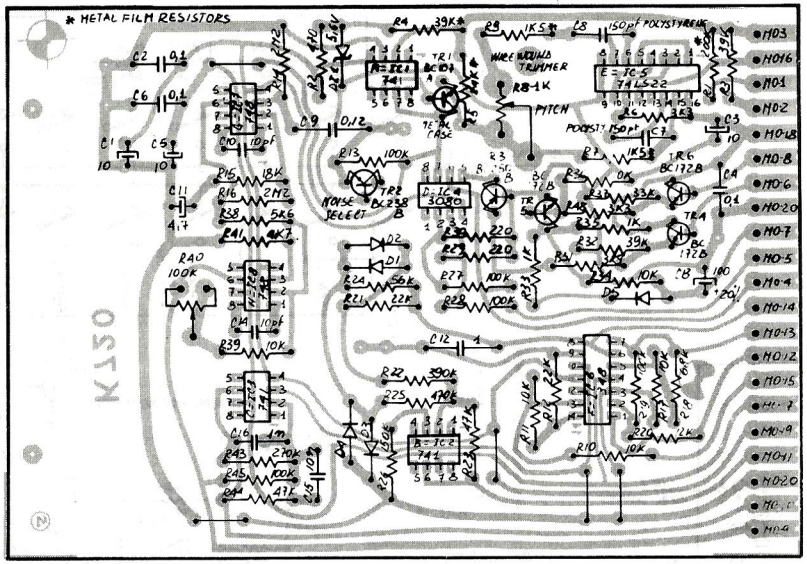
POS	DENOMINAZIONE	MATERIALE	N PEZZI	N DIS	CODICE
EKO RECANATI					
Disegnato	20/3/1978				
Controllato	23/6/78				
Approvazione	26/6/78				
Materiale					
Trattamento					

Denominazione: ELECTRIC SCHEMATIC
Serve per: EKOSYNTH
SCALA
SHEET 3 OF 5
NUMERO 788
MODIFICHE

ADSR VCF - ADSR VCA - P.C. BOARD COMP. SIDE UP - P.C. Nº K-718

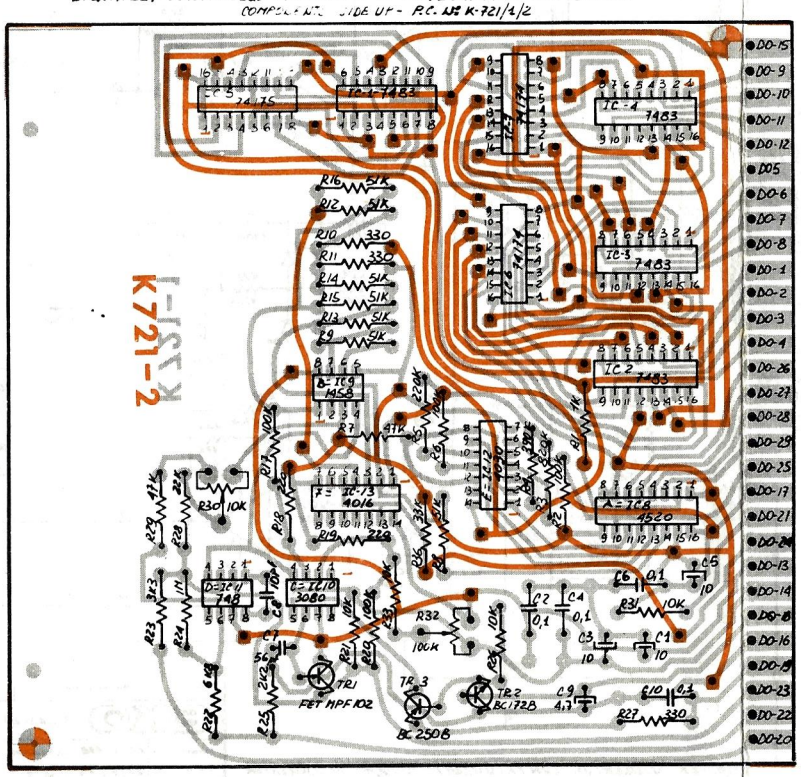


MASTER OSCILL. - LOW FREQ. - MODULATING OSCILL. - NOISE GEN. - WB. DELAY - COMP. SIDE UP - P.C. Nº K-720



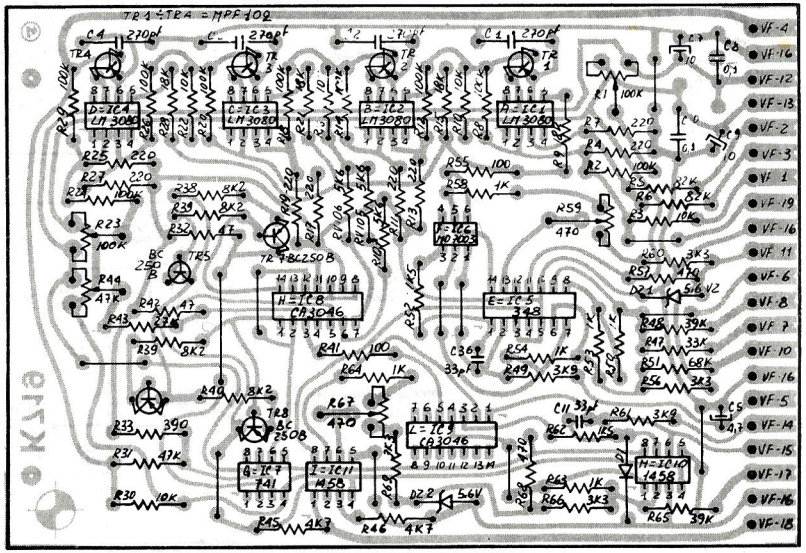
DIGITALLY CONTROLLED OSCILLATOR & WAVESHAPING P.C. BOARD

COMPONENTS SIDE UP - P.C. Nº K-721/1/2

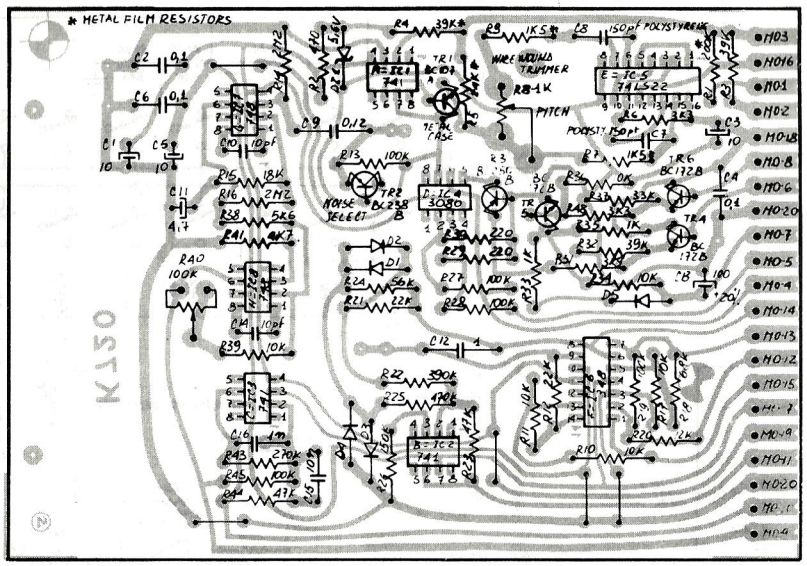


VOLTAGE CONTROLLED FILTER - VOLTAGE CONTR. AMPLIFIER P.C. BOARD

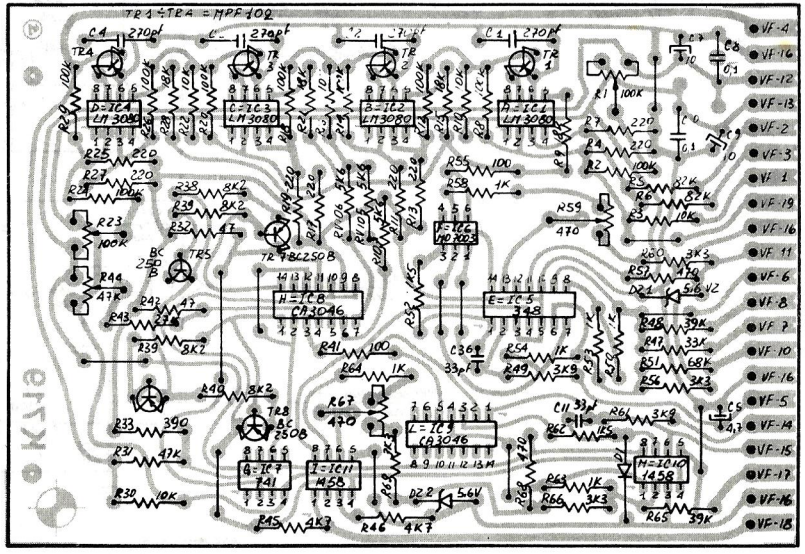
COMPONENTS SIDE UP - P.C. Nº K-719



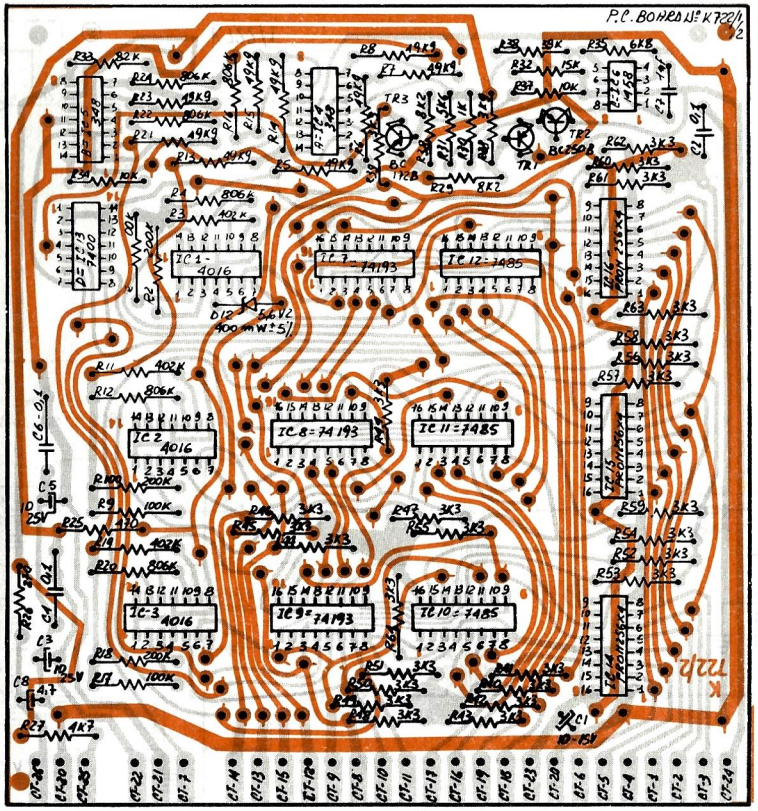
MASTER OSCILL. - LOW FREQ. - MODULATING OSCILL. - NOISE GEN. - VIB. DELAY. - COMP. SIDE UP - P.C. Nº K-720



VOLTAGE CONTROLLED FILTER - VOLTAGE CONTR. AMPLIFIER P.C. BOARD
COMPONENTS SIDE UP - P.C. Nº K-719

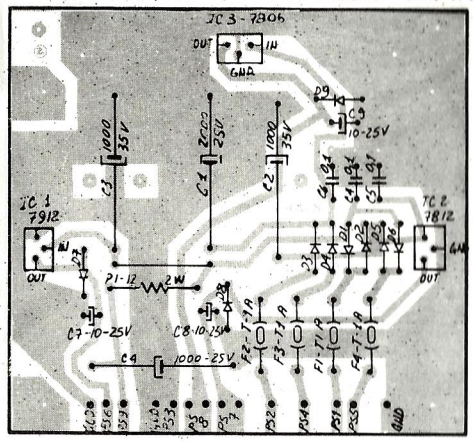


CODE CONVERSION - TRACING CONTROL & PORTAMENTO P.C. BOARD COMPONENTS SIDE UP

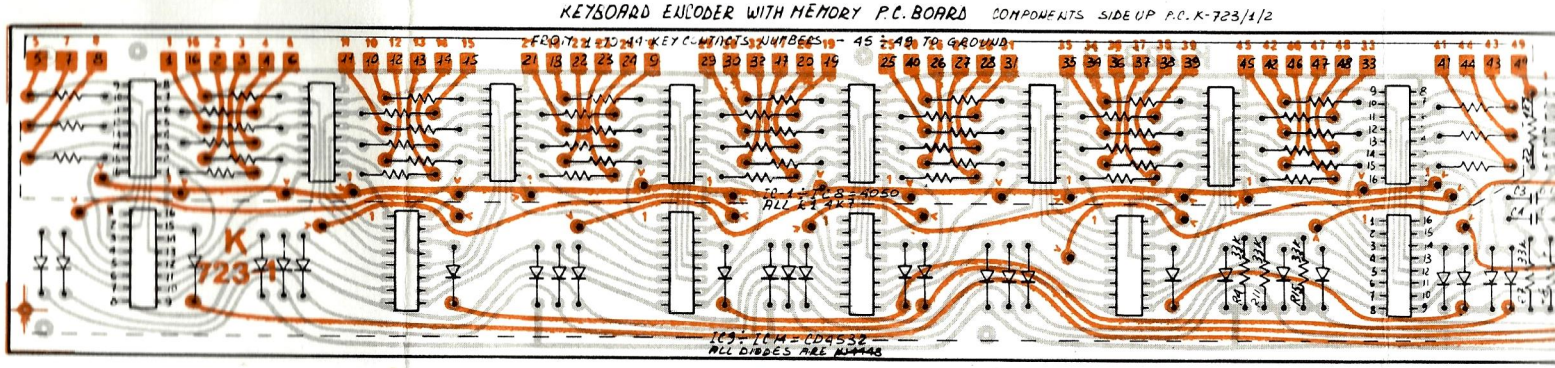


EKO RECANATI		DESIGNAZIONE	PRINTED CIRCUIT BOARDS
DISEGNATO	14/6/1978		
CONTROLLO	23/6/1978	SIGLA PAT.	EKO SYNTH
APPROVAZIONE	4/6/78	SCALA	SHEET - 4 OF - 5
MATERIALE			NUMERO 788
TRATTAMENTO			

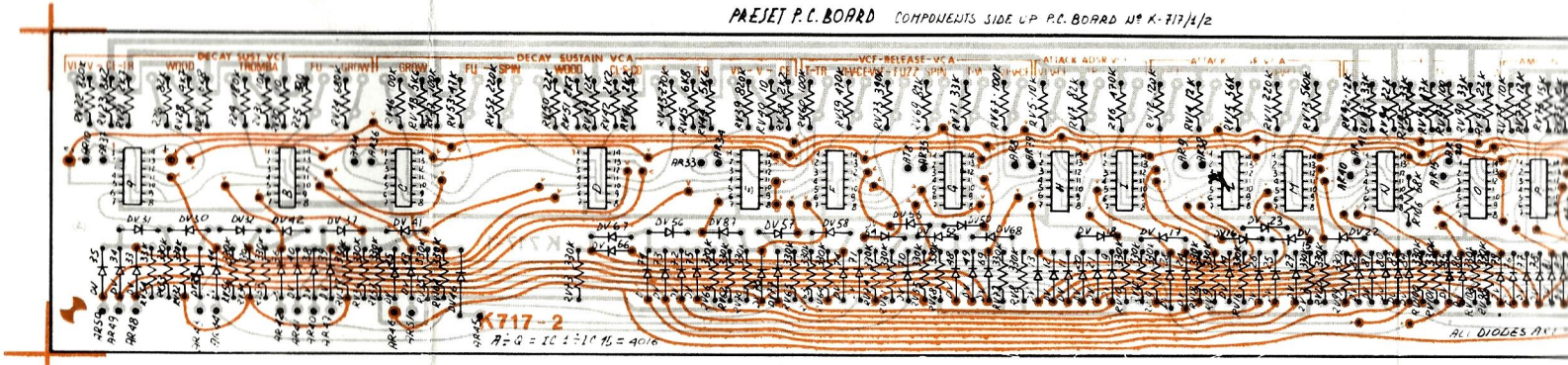
POWER SUPPLY P.C. BOARD COMP. SIDE UP - P.C. Nº K-750

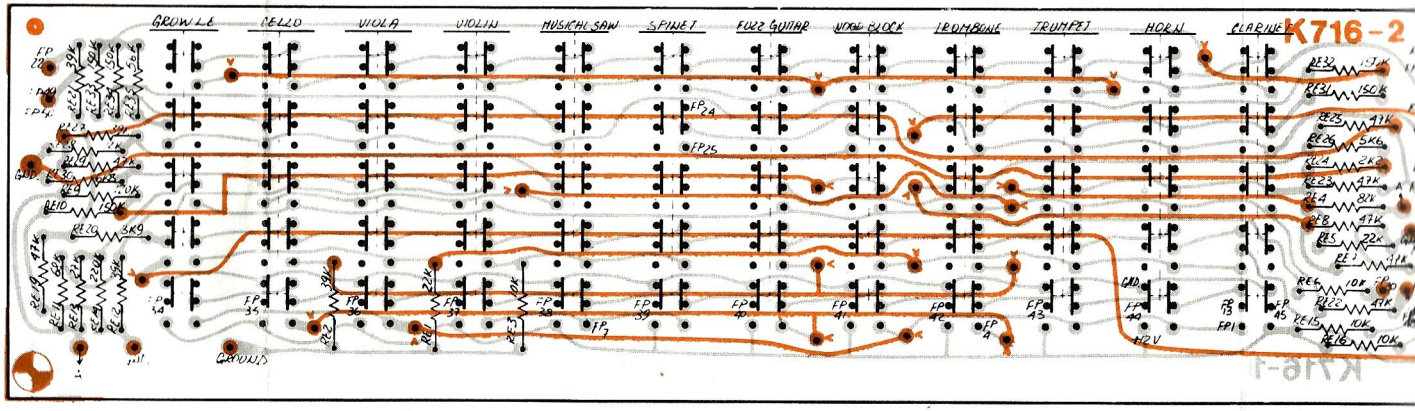


KEYBOARD ENCODER WITH MEMORY P.C. BOARD COMPONENTS SIDE UP P.C. K-723/1/2



PRESET P.C. BOARD COMPONENTS SIDE UP P.C. BOARD Nº K-717/1/2

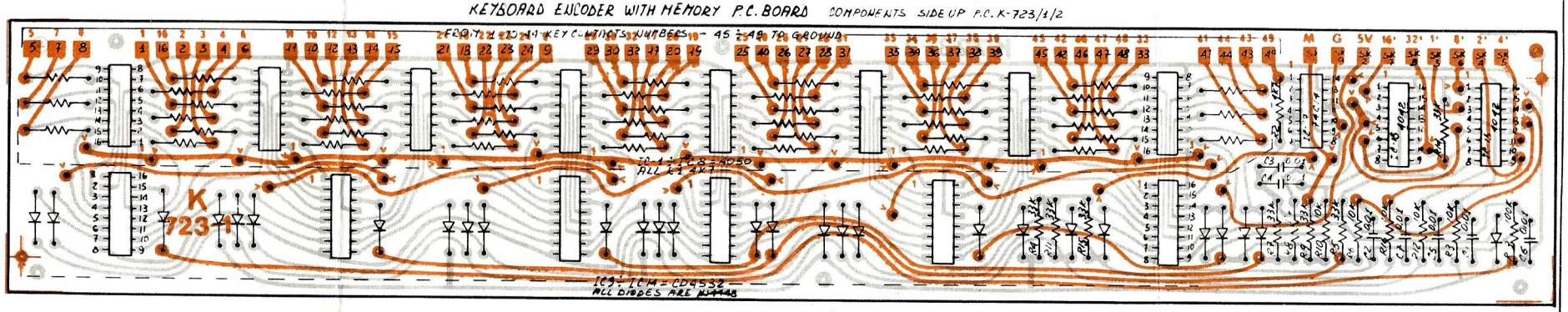




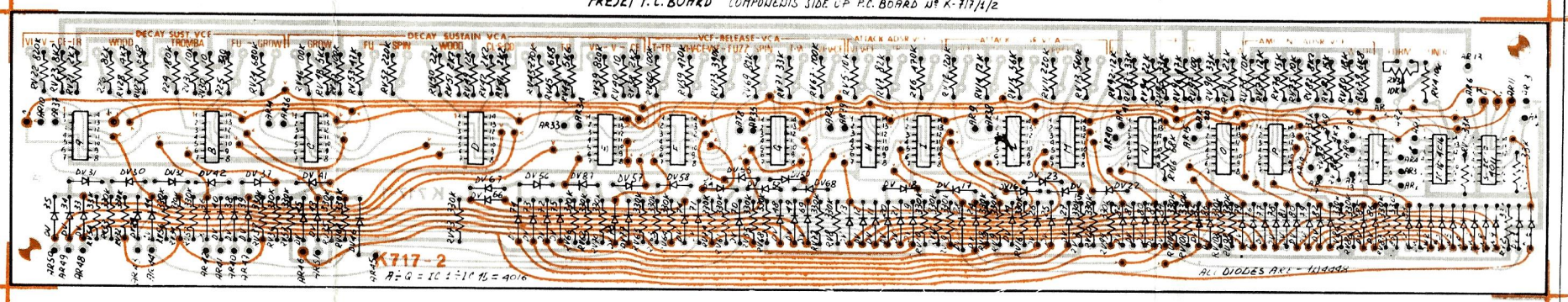
PRESET SWITCHES P.C. BOARD COMP. SIDE UP - P.C. Nº K-716/1/2

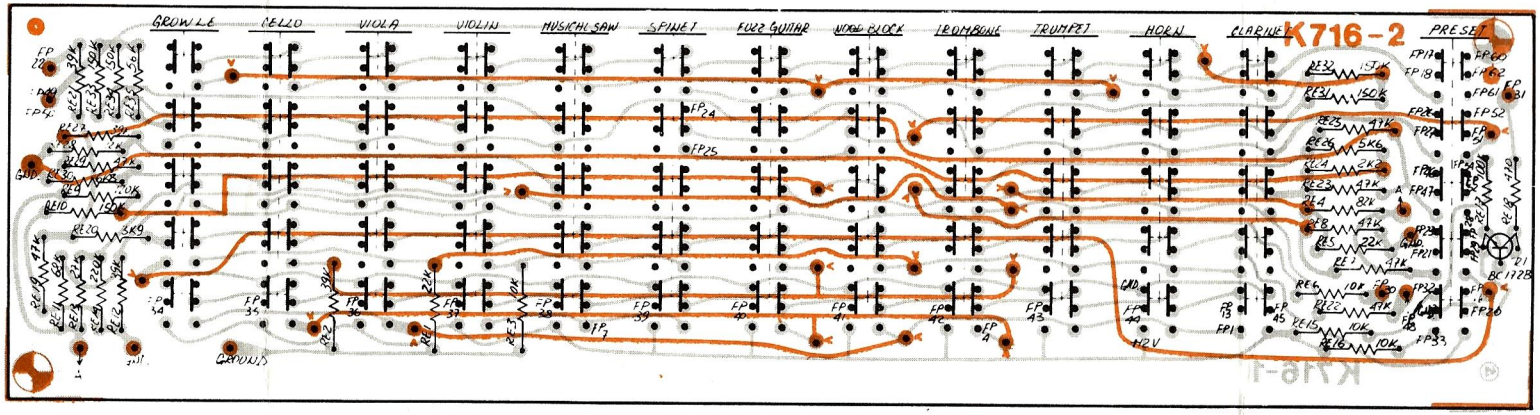
ELKO RECANATI
19/6/1978 Peruzzo
23/6/1978 Pellegrini
28/6/78 Fabiani

KEYBOARD ENCODER WITH MEMORY P.C. BOARD COMPONENTS SIDE UP P.C. K-723/1/2



PRESET P.C. BOARD COMPONENTS SIDE UP P.C. BOARD Nº K-717/1/2





PRESET SWITCHES P.C. BOARD COMP. SIDE UP - P.C. Nº K-716/1/2

EKO RECANATI

19/6/1978 Peirone
23/6/1978 Melloni
26/6/78 Fabris

PRINTED CIRCUIT BOARDS

EKOSYNTH
SHEET- 5
OF- 5

788